

## Cessna 172R & S Normal Checklist

### PREFLIGHT

Documents ..... A R O W  
 Control Lock ..... REMOVE  
 Magnetos ..... OFF  
 Fuel Selector .....  EA. POS, BOTH  
 Fuel Shutoff Valve ..... ON (FULL IN)  
 Avionics Master ..... OFF  
 Circuit Breakers ..... ALL IN  
 Master ..... ON  
 Fuel Quantity Indicators ..... CHECK  
 Low Fuel Lights ..... OFF  
 Turn Coordinator ..... NO FLAG  
 Flaps ..... DOWN  
 Avionics Master ..... ON,  FAN, OFF  
 Lights & Pitot Heat ..... ON,  OFF  
 Master ..... OFF  
 Left Fuel Tank ..... CHECK VISUALLY  
 Right Fuel Tank ..... CHECK VISUALLY  
 All Tie Downs ..... REMOVED  
 Left Tank Sumps ..... DRAIN &  (X5)  
 Main Tire & Brakes ..... CHECK  
 Baggage Door ..... SECURE  
 Rudder, Elevators ..... FREE & SECURE  
 Antennas ..... SECURE  
 Right Flap ..... CHECK  
 Right Aileron ..... FREE & SECURE  
 Wingtip & Leading Edge ..... CHECK  
 Right Tank Sumps ..... DRAIN &  (5)  
 Main Tire & Brakes ..... CHECK  
 Engine Oil Quantity ..... CHECK (5-8qts)  
 Access Door ..... CLOSED  
 Fuel Strainer ..... DRAIN &  (3)  
 Exhaust ..... SECURE  
 Nose Wheel & Strut ..... CHECK  
 Prop & Spinner ..... CHECK  
 Cooling Intakes ..... CLEAR  
 Alternator Belt ..... SECURE  
 Air Filter ..... CLEAR  
 Nose Wheel & Strut ..... CHECK  
 Static Port ..... CLEAR  
 Pitot Tube ..... CLEAR  
 Stall Indicator ..... CHECK & TEST  
 Fuel Vent ..... CLEAR  
 Leading Edge & Wingtip ..... CHECK  
 Left Aileron ..... FREE & SECURE  
 Left Flap ..... CHECK

### PRE-START

Preflight ..... COMPLETE  
 Passenger Briefing ..... COMPLETE  
 Seats, Belts, Harnesses ..... SECURED  
 Avionics Master ..... OFF  
 Autopilot ..... OFF  
 Beacon ..... ON  
 Throttle ..... OPEN 1/2"  
 Mixture ..... IDLE CUTOFF  
 Brakes ..... HOLD

### START

Master ..... ON  
 Aux Fuel Pump ..... ON  
 Mixture Rich ..... 3-5 GPH  
 Mixture ..... IDLE CUTOFF  
 Aux Fuel Pump ..... OFF  
 Propeller Area ..... CLEAR  
 Magnetos ..... START  
 Mixture ..... RICH (Smoothly)  
 Oil Pressure ..... CHECK  
 Avionics Master ..... ON  
 Lights ..... ON as req'd  
 Mixture ..... LEAN  
 Flaps ..... UP  
 Transponder ..... STANDBY

### TAXI

Brakes ..... TEST  
 Turn Instruments .....  RIGHT & LEFT

#### VFR Day Minimum Equipment:

Gas Gauges, Oil Temp, Oil Pres., Seat Belts, ELT,  
 Altimeter, Compass, Airspeed indicator, Tach.,  
 Ldg gear position ind., Manifold Pressure gauge,  
 Temp gauge (lqd cooled)

#### VFR Night Minimum Equipment:

Position Lights (NAV), Anit-Collision Lights  
 (beacon, strobes), Landing Light (if for hire),  
 Electrical source, Spare fuses.

#### IFR Minimum Equipment:

D irectional Gyro  
 E lectrical source  
 C lock (h:m:s)  
 A ltimeter (pressure sensitive)  
 R adios appropriate for nav aids to be used  
 A ttitude indicator  
 T urn Coordinator  
*VOR Check last 30 days*

## Cessna 172R & S Normal Checklist

### RUNUP

Brakes ..... HOLD  
 Fuel Selector ..... BOTH  
 Trim ..... TAKEOFF  
 Flight Controls ..... FREE & CORRECT  
 Flight Instruments ..... SET, CORRECT  
 Mixture ..... RICH  
 Throttle ..... 1800 RPM  
 Magnetos ..... CHECK (150/50)  
 Vacuum ..... CHECK  
 Amps / Volts ..... CHECK  
 Oil Pressure ..... CHECK  
 Oil Temp ..... CHECK  
 Annunciator Panel ..... TEST  
 Throttle ..... IDLE CHECK  
 Throttle Friction ..... SET  
 Autopilot ..... TEST  
 Departure ..... REVIEW

### PRE-TAKEOFF

Flaps ..... 0° to 10°  
 Mixture ..... BEST POWER  
 Aux. Fuel Pump ..... OFF  
 H.I. to Compass ..... SET  
 Transponder ..... ALT  
 Lights ..... ON  
 Time ..... RECORD

### ABORT PLAN READY!

### TAKEOFF

Throttle ..... FULL (2150rpm)  
 Oil Pressure ..... CHECK  
 Rotate ..... 55  
 Climb Speed ..... Vy

**Short Field:** Flaps 10°, Brakes hold, power full, Brakes release, Vr 55, Climb 57 till obs clear.

**Soft Field:** Flaps 10°, Elevator full aft, accelerate in gnd effect to Vy.

### CLIMB

Airspeed ..... 70 – 85 KIAS  
 Throttle ..... FULL  
 Mixture ..... LEAN ABOVE 3000'  
 Landing Light ..... OFF  
 Instruments ..... CHECK

### CRUISE

Power ..... SET (no more then 80%)  
 Trim ..... SET  
 Mixture ..... LEAN (EGT)  
 H.I. to Compass ..... SET

### DESCENT

Power ..... AS DESIRED  
 Mixture ..... ADJUST (Full Rich for Idle)  
 Fuel Selector ..... BOTH  
 H.I. to Compass ..... SET

### PRE-LANDING

Seats & Seat Belts ..... SECURED  
 Fuel Selector ..... BOTH  
 Mixture ..... RICH  
 Landing Light ..... ON  
 Autopilot ..... OFF

### A B C G U M P S

### LANDING

Flaps ..... 30°  
 Airspeed ..... 65 KIAS

### GO AROUND

Throttle ..... FULL  
 Flaps ..... RETRACT TO 20°  
 Climb Speed ..... 55 KIAS  
 Flaps 10° till clear, RETRACT @ 60 KIAS

### AFTER LANDING

Flaps ..... UP  
 Mixture ..... LEAN  
 Transponder ..... STANDBY  
 Lights ..... OFF (non-essential)  
 Pitot Heat ..... OFF

### SECURING

Avionics Master ..... OFF  
 Magnetos ..... GROUND CHECK  
 Mixture ..... IDLE CUTOFF  
 Magnetos ..... OFF  
 Master ..... OFF  
 Lights ..... OFF  
 Control Lock ..... INSTALL  
 Tie Downs ..... INSTALL

## Cessna 172R & S Emergency Checklist

### ENGINE FAILURE AFTER TAKEOFF

Airspeed.....65 KIAS  
 Mixture ..... IDLE CUTOFF  
 Fuel Shutoff Valve..... OFF (PULL)  
 Magnetos .....OFF  
 Flaps .....AS REQUIRED  
 Master.....OFF  
 Door..... UNLATCH  
 Land..... STRAIGHT AHEAD

### ENGINE FAILURE DURING FLIGHT

Airspeed..... 65  
 Fuel Shut Off Valve..... ON (Push Full In)  
 Fuel Selector..... BOTH  
 Aux. Fuel Pump..... ON  
 Mixture ..... RICH  
 Magnetos ..... BOTH (start if prop stopped)

### EMERGENCY LANDING WITHOUT POWER

Passenger Seat Backs..... UPRIGHT  
 Seats, Seat Belts..... SECURE  
 Airspeed..... 65  
 Mixture ..... IDLE CUTOFF  
 Fuel Shutoff Valve... OFF(PULL FULL OUT)  
 Magnetos .....OFF  
 Flaps ..... AS REQUIRED  
 Master.....OFF  
 Doors ..... UNLATCH  
 Touchdown ..... SLIGHTLY TAIL LOW  
 Brakes ..... APPLY HEAVILY

### PRECAUTIONARY LANDING WITH POWER

Passenger Seat Backs..... UPRIGHT  
 Seats, Seat Belts..... SECURE  
 Airspeed..... 60  
 Flaps ..... 20°  
 Selected Field..... FLY OVER, Note terrain  
 Avionics Master..... OFF  
 Flaps ..... 30° (on Final)  
 Airspeed..... 60  
 Master..... OFF  
 Doors ..... UNLATCH  
 Touchdown ..... SLIGHTLY TAIL LOW  
 Magnetos ..... OFF  
 Brakes ..... APPLY HEAVILY

### DITCHING

Radio .....MAYDAY 121.5, SQWK 7700  
 Heavy Objects .....SECURE or JETTISON  
 Passenger Seat Backs ..... UPRIGHT  
 Seats, Seat Belts ..... SECURE  
 Flaps ..... 20° to 30°  
 Power...300ft/min DESCENT @ 55 KIAS  
 ..... Or at 65 with no power  
 Approach:  
 High Winds or Seas ..... INTO WIND  
 Lgt Winds/Hvy Swells, PARALLEL SWELLS  
 Touchdown..... LEVEL ATTITUDE  
 Face ..... CUSHION  
 ELT ..... ACTIVATE  
 Airplane..... EVACUATE

### FIRE DURING START

Cranking ..... CONTINUE  
 If Engine Starts:  
 Power..... 1700 RPM for a Minute  
 Engine ..... SHUTDOWN  
 If Engine Fails to Start:  
 Throttle ..... FULL OPEN  
 Mixture ..... IDLE CUTOFF  
 Cranking ..... CONTINUE  
 Fuel Shutoff Valve... OFF (PULL OUT)  
 Aux. Fuel Pump..... OFF  
 Fire Extinguisher ..... OBTAIN  
 Engine ..... SECURE  
 Master ..... OFF  
 Magnetos ..... OFF  
 Parking Brake ..... RELEASE  
 Airplane ..... EVACUATE  
 Fire..... EXTINGUISH

### ENGINE FIRE IN FLIGHT

Mixture ..... IDLE CUTOFF  
 Fuel Shutoff Valve ..... OFF (Pull Out)  
 Aux. Fuel Pump..... OFF  
 Master ..... OFF  
 Cabin Heat & Air ..... OFF  
 Airspeed ..... 100 KIAS  
 Force Landing ..... EXECUTE

## Cessna 172R & S Emergency Checklist

### ELECTRICAL FIRE IN FLIGHT

Master.....OFF  
 Vents, Cabin Air, Heat ..... CLOSED  
 Fire Extinguisher ..... ACTIVATE  
 Avionics.....OFF  
 All Other Electrical.....OFF  
 Vents..... OPEN WHEN FIRE OUT  
*If Fire is out and electrical required for flight:*  
 Master..... ON  
 Circuit Breakers..... , Do Not Reset  
 Radios .....OFF  
 Avionics..... ON  
 Radios/Electrical..... ON, one at a time

### CABIN FIRE

Master.....OFF  
 Vents/Cabin Air/Heat .....OFF  
 Fire Extinguisher ..... ACTIVATE  
 Vents/Cabin Air/Heat ..... OPEN, if fire out  
 Land..... ASAP

### WING FIRE

Landing/Taxi Light.....OFF  
 Navigation Lights .....OFF  
 Strobe Lights .....OFF  
 Pitot Heat.....OFF  
 Side Slip to keep fire away from tanks and cabin

### ICING

Pitot Heat..... ON  
 Turn 180° or Change Altitude  
 Cabin Heat On, Open Defrost Vents  
 Watch for signs of engine related Icing  
 Plan Landing Site  
 Land w/ flaps up  
 Open window, scrape ice for Visibility  
 Approach with forward slip for Visibility

### AMMETER SHOWS EXCESSIVE RATE OF CHARGE

*(full scale deflection)*  
 Alternator ..... OFF  
 \*w/ Alt. Off compass dev. Of 25° may occur  
 Nonessential Electrical ..... OFF  
 Flight ..... TERMINATE

### LOW VOLTAGE ANNUNCIATOR ILLUMINATES DURING FLIGHT

Avionics Master ..... OFF  
 Alternator Circuit Breaker..... CHECK IN  
 Master..... OFF  
 Master..... ON  
 Low Voltage Annunciator... CHECK OFF  
 Avionics Master ..... ON  
*If low voltage light illuminates again:*  
 Alternator ..... OFF  
 Nonessential Electrical ..... OFF  
 Flight ..... TERMINATE

### VACUUM SYSTEM FAILURE

Vacuum Gauge ..... CHECK, within limits  
 *If vacuum is not within normal limits, a failure has occurred in the vacuum system and partial panel procedures may be required for continued flight.*

### GENERAL INFORMATION

C172R	C172S
Vr 55	Vr 55
Vx 60	Vx 62
Vy 79	Vy 74
Vso 33	Vso 40
Vs 44	Vs 48
Va 99	Va 105
Vfe 110(10°)	Vfe 110(10°)
Vfe 85(10°-30°)	Vfe 85(10°-30°)
Vno 129	Vno 129
Vne 163	Vne 163
Vglide 65	Vglide 68
XWind 15	XWind 15

**Max. Takeoff Weight:** 2450 lbs (2550 172S)  
**Max. Landing Weight:** 2450 lbs (2550 172S)  
**Max. Baggage Area:** 120 lbs total

**Usable Fuel:** 53 gallons (318lbs)  
**Oil Capacity:** 8 quarts (5 min.)  
**Electrical:** 24-28 Volt / 60 Amp  
**Tire Pressure:** Nose - 34psi / Main - 28psi